

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

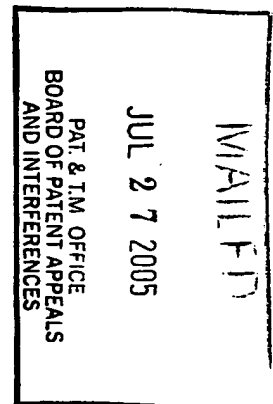
**UNITED STATES PATENT AND TRADEMARK OFFICE**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Ex parte MURALIDHARAN S. KODIALAM  
and TIRUNELL V. LAKSHMAN

Appeal No. 2005-1967  
Application No. 09/535,206

ON BRIEF



Before HAIRSTON, SMITH, and GROSS, Administrative Patent Judges.  
HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 through 10.

The disclosed invention relates to a method of dynamically establishing restorable paths in an information network in response to arriving traffic requests. The network has a number of nodes and links between nodes. In response to a request received at a first node, transmission of traffic to a second node is performed based upon a specifically desired transmission bandwidth for both an active path and a backup path to be established between the first and second nodes. The traffic information is distributed to nodes in the network based upon total bandwidth reserved

by each link in the network for all active paths currently defined in the network, and total bandwidth reserved by each link in the network for all backup paths currently defined in the network.

Claim 1 is illustrative of the claimed invention, and it reads as follows:

1. A method of dynamically establishing restorable paths in an information network in response to arriving traffic requests, the network having a number of nodes and links between corresponding pairs of nodes, comprising:

receiving requests at a first node of the network for transmission of traffic to a second node of the network, wherein a given request specifies a desired transmission bandwidth for an active path and a backup path to be established between the first and the second nodes;

distributing information to nodes in the network concerning (a) total bandwidth reserved by each link in the network for all active paths currently defined in the network, and (b) total bandwidth reserved by each link in the network for all backup paths currently defined in the network;

identifying potential active links in the network for an active path in response to a given request, wherein the potential active links each have an available bandwidth at least equal to the bandwidth specified by the given request;

identifying potential backup links in the network for a backup path for restoring the active path after the given request has arrived, wherein the potential backup links each have an available bandwidth at least equal to the desired transmission bandwidth specified by the given request; and

formulating an active and a backup path for each given request from among the potential active links and the potential backup links identified in response to the given request.

The reference relied on by the examiner is:

Hou, "Design of a Fast Restoration Mechanism for Virtual Path-Based ATM Networks," IEEE, 1997, pages 361 through 369.

Claims 1 through 10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Hou.

Reference is made to the briefs and the answer for the respective positions of the appellants and the examiner.

#### OPINION

We have carefully considered the entire record before us, and we will reverse the anticipation rejection of claims 1 through 10.

Anticipation is established when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of the claimed invention. RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984).

As the title of the publication indicates, Hou is concerned with a fast restoration mechanism for a virtual path-based Asynchronous Transfer Mode (ATM) network. In the topology of the ATM network, the data is transferred on a virtual circuit (VC) (i.e., an active path), and, in the event of a failure of VC, a primary virtual path (VP) (i.e., a backup path) is provided as a backup data path for VC. As a safeguard against failure of both VC and VP, Hou pre-assigns to each VP a backup VP to ensure a fast restoration of the data transfer (Abstract; Introduction; page 361). Hou expressly states

that the bandwidth of a backup path VP can be reserved (page 361, right column; page 362, right column ), but is completely silent as to bandwidth reservation for the active path VC. Thus, the anticipation rejection of claims 1 through 5 is reversed because we agree with the appellants' argument (brief, pages 6 through 8) that Hou does not disclose "total bandwidth reserved by each link in the network for all active paths currently defined in the network" (Emphasis added).

The anticipation rejection of claims 5 through 10 is likewise reversed because we agree with the appellants' argument (brief, page 9) that since "Hou does not disclose using a maximum total bandwidth reservation among the active links," Hou, therefore, can not disclose "selecting backup links in the network to form a backup path for restoring the formed active path after the given request has arrived, by using a maximum total bandwidth reservation among the active links selected to form the active path to determine a required bandwidth reservation for each backup link selected to form the backup path."

REVERSED

  
KENNETH W. HAIRSTON  
Administrative Patent Judge

*Jerry Smith*  
JERRY SMITH  
Administrative Patent Judge

*Anita Pellman Gross*  
ANITA PELLMAN GROSS  
Administrative Patent Judge

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6

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